

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) An apparatus ~~spread spectrum receiver~~ for receiving multiple spread spectrum signals each traveling upon a different propagation path and each having a resultant arrival time difference with respect to one another, ~~said spread spectrum receiver~~ comprising:

a first demodulator ~~means~~ for demodulating a first spread spectrum signal of said multiple spread spectrum signals in accordance with a first arrival time; and

a second demodulator ~~means~~ for demodulating a second spread spectrum signal of said multiple spread spectrum signals in accordance with a time interval difference with respect to said first arrival time,

wherein said first demodulator ~~means~~ comprises:

a pseudorandom noise descrambler~~[[ing]]~~ ~~means~~ for descrambling said first spread spectrum signal in accordance with a pseudorandom noise sequence;

a phase adjustor~~[[ment]]~~ ~~means~~ for extracting a pilot signal from said descrambled first spread spectrum signal and multiplying said descrambled first spread spectrum signal with said pilot signal, thereby forming a phase adjusted signal; and

a dechannelization unit ~~means~~ for multiplying said phase adjusted signal by an orthogonal channel sequence.

2. (Cancelled)

3. (Currently Amended) The apparatus ~~spread spectrum receiver~~ of Claim 1 further comprising a Walsh sequence generator ~~means~~ for generating said orthogonal channel sequence and wherein said dechannelization unit ~~means further~~ comprises:

delay element for receiving said orthogonal channel sequence and for delaying said orthogonal channel sequence by said ~~fixed~~ time interval to provide ~~said~~ a delayed orthogonal channel sequence to said second demodulator.

4. (Currently Amended) The apparatus ~~spread spectrum receiver~~ of Claim 1 wherein said phase adjuster ~~means~~ comprises:

a pilot filter for extracting said pilot signal from said first spread spectrum signal; and
complex conjugate multiplier ~~means~~ for receiving said first spread spectrum signal and said extracted pilot signal and for multiplying said descrambled first spread spectrum signal with said extracted pilot signal.

5. (Currently Amended) The apparatus ~~spread spectrum receiver~~ of Claim 4 wherein said pilot filter extracts said pilot signal in accordance with an orthogonal pilot sequence.

6. (Currently Amended) The apparatus ~~spread spectrum receiver~~ of Claim 1 further comprising a combiner ~~means~~ for receiving said first demodulated spread spectrum signal and said second demodulated spread spectrum signal and for combining said a delayed first demodulated spread spectrum signal and said second demodulated spread spectrum signal to provide an improved estimate of a spread spectrum signal.

7. (Currently Amended) The apparatus ~~spread spectrum receiver~~ of Claim 1 further comprising a ~~switching means~~ for providing said first spread spectrum signal to said first demodulator ~~means~~ and for switching after said ~~fixed~~ time interval to provide said second spread spectrum signal to said second demodulator ~~means~~.

8. (Previously Presented) A method for receiving multiple spread spectrum signals each traveling upon a different propagation path and each having a resultant arrival time difference with respect to one another, said method comprising the steps of:

demodulating a first spread spectrum signal of said multiple spread spectrum signals in accordance with a first arrival time; and

demodulating a second spread spectrum signal of said multiple spread spectrum signals in accordance with a time interval difference with respect to said first arrival time,
wherein said step of demodulating said first spread spectrum signal comprises the steps of:

descrambling said first spread spectrum signal in accordance with a pseudorandom noise sequence;

extracting a pilot signal from said descrambled first spread spectrum signal;

multiplying said descrambled first spread spectrum signal with said pilot signal, thereby forming a phase adjusted signal; and

multiplying said phase adjusted signal by an orthogonal channel sequence.

9. (Cancelled)

10. (Currently Amended) The method of Claim 8 further comprising the steps of:

generating said orthogonal channel sequence; and

delaying said orthogonal channel sequence by said ~~fixed~~ time interval to provide [[said]] a delayed orthogonal channel sequence.

11. (Currently Amended) The method of Claim 8 further comprising the step of combining [[said]] a delayed first demodulated spread spectrum signal and said second demodulated spread spectrum signal to provide an improved estimate of a spread spectrum signal.

12. (Currently Amended) The method of Claim 8 further comprising the steps of:

first switching to provide said first spread spectrum signal; and

second switching after said ~~fixed~~ time interval to provide said second spread spectrum signal.

13. (Previously Presented) An apparatus for receiving multiple spread spectrum signals each traveling upon a different propagation path and each having a resultant arrival time difference with respect to one another, said apparatus comprising:

means for demodulating a first spread spectrum signal of said multiple spread spectrum signals in accordance with a first arrival time; and

means for demodulating a second spread spectrum signal of said multiple spread spectrum signals in accordance with a time interval difference with respect to said first arrival time,

wherein said means for demodulating said first spread spectrum signal comprises:

means for descrambling said first spread spectrum signal in accordance with a pseudorandom noise sequence;

means for extracting a pilot signal from said descrambled first spread spectrum signal;

means for multiplying said descrambled first spread spectrum signal with said pilot signal, thereby forming a phase adjusted signal; and

means for multiplying said phase adjusted signal by an orthogonal channel sequence.

14-20. (Cancelled)

21. (New) The apparatus of Claim 13 further comprising:

means for generating said orthogonal channel sequence; and

means for delaying said orthogonal channel sequence by said fixed time interval to provide said orthogonal channel sequence.

22. (New) The apparatus of Claim 13 further comprising means for combining said first demodulated spread spectrum signal and said second demodulated spread spectrum signal to provide an improved estimate of a spread spectrum signal.

23. (New) The apparatus of Claim 13 further comprising:

means for first switching to provide said first spread spectrum signal; and

means for second switching after said fixed time interval to provide said second spread spectrum signal.

24. (New) A computer program product, comprising:

a computer-readable medium comprising code for causing at least one computer for:

demodulating a first spread spectrum signal of multiple spread spectrum signals in accordance with a first arrival time; and

demodulating a second spread spectrum signal of said multiple spread spectrum signals in accordance with a time interval difference with respect to said first arrival time, wherein said demodulating said first spread spectrum signal comprises:

descrambling said first spread spectrum signal in accordance with a pseudorandom noise sequence;

extracting a pilot signal from said descrambled first spread spectrum signal;

multiplying said descrambled first spread spectrum signal with said pilot signal, thereby forming a phase adjusted signal; and

multiplying said phase adjusted signal by an orthogonal channel sequence.

25. (New) The computer program product of Claim 24 further comprising code for:

generating said orthogonal channel sequence; and

delaying said orthogonal channel sequence by said fixed time interval to provide said orthogonal channel sequence.

26. (New) The computer program product of Claim 24 further comprising code for combining said first demodulated spread spectrum signal and said second demodulated spread spectrum signal to provide an improved estimate of a spread spectrum signal.

27. (New) The computer program product of Claim 24 further comprising code for:

first switching to provide said first spread spectrum signal; and

second switching after said fixed time interval to provide said second spread spectrum signal.